

WHAT IS CLAIMED IS:

1. A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received
5 from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets
composing said packet stream;

a record and reproduction unit by which said packet stream passing through
said packet filter is recorded, and said recorded packet stream is reproduced and
10 outputted;

an information table generator that generates, with respect to a first specific
information table in various information tables contained in said packet stream, a new
first specific information table containing information only on a program to be recorded
in said record and reproduction unit; and

15 an information table substitution unit by which said new first specific
information table is substituted for an information table corresponding to said first
specific information table contained in said packet stream transmitted, said information
table substitution unit being disposed between said receive and demodulation section and
said record and reproduction unit.

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2. The digital broadcast receiving system according to claim 1, wherein said
first specific information table is a PAT (Program Association Table).

3. The digital broadcast receiving system according to claim 1, wherein said
25 packet filter filters, of a plurality of second specific information tables contained in said

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packet stream transmitted, an information table other than said second specific information table related to said program to be recorded.

4. The digital broadcast receiving system according to claim 3, wherein said
5 second specific information table is a PMT (Program Mapping Table).

5. The digital broadcast receiving system according to claim 4, wherein,
said information table generator has a function with which a specific value is
substituted for the PID value of a packet for transmitting a ES (Elementary Stream)
10 described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific
value is substituted for the PID value of a packet for transmitting a ES contained in said
packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section
15 for retaining said specific value.

6. The digital broadcast receiving system according to claim 1, wherein,
in said information table generator, a new CAT (Conditional Access Table)
containing the encrypted state of said digital broadcast signal is generated with respect to
20 a CAT in said variety of information tables; and

in said information table substitution unit, said new CAT is substituted for a
CAT contained in said packet stream transmitted.

7. The digital broadcast receiving system according to claim 1, further
25 comprising:

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an information table extractor that extracts at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and

a recording section that records information contained in either or both of said
5 SDT and said EIT to be extracted by said information table extractor, and wherein,

said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.

10 8. The digital broadcast receiving system according to claim 1, further comprising:

a control section that controls the operation of receiving said digital broadcast signal; and

an information table extractor by which, from said packet stream outputted
15 from said receive and demodulation section, a specific SI (Service Information) table in said various information tables is extracted to inform its contents to said control section, and wherein,

said packet filter filters said specific SI table contained in said packet stream transmitted.

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9. The digital broadcast receiving system according to claim 1, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

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a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a record and reproduction unit by which said packet stream passing through said packet filter is recorded, and said recorded packet stream is reproduced and outputted, wherein,

said digital broadcast receiving system further comprising a recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section.

an information table generator that generates a new information table with
25 respect to a specific information table in said various information tables filtered by said

packet filter; and

an information table insertion unit for inserting said new information table to said packet stream transmitted, disposed between said receive and demodulation section and said record and reproduction unit.

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13. The digital broadcast receiving system according to claim 12, wherein a specific value is substituted for the PID value of a packet transmitting a ES described in a PMT, in said program information index; and

10 said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting a ES contained in said packet stream transmitted.

14. The digital broadcast receiving system according to claim 11, wherein said program information index contains information described in at least one of an SDT and an EIT.

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15. The digital broadcast receiving system according to claim 14, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

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16. A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

25 a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

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a record and reproduction unit by which said packet stream passing through said packet filter is recorded, and said recorded packet stream is reproduced and outputted;

an information table generator for generating a predetermined information
5 table;

an output information insertion unit by which said predetermined information table is inserted to said packet stream outputted from said record and reproduction unit, thereby to output it as a new packet stream; and

a circuit changing switch that performs a selective switching between said
10 packet stream outputted from said receive and demodulation section, and said new packet stream outputted from said output information insertion unit, thereby performing its transmission to a digital output section.

17. The digital broadcast receiving system according to claim 16, wherein,
15 said information table generator has a function with which the value of the program_number of a program recorded in said record and reproduction unit is subjected to an arbitrary alteration, to generate said predetermined information table; and

said output information insertion unit has a function with which the value obtained by said alteration to said program_number is provided to said packet stream
20 transmitted.

18. The digital broadcast receiving system according to claim 16, wherein,
said information table generator has a function with which the PID value of a
ES to be described is subjected to an arbitrary alteration, to generate said predetermined
25 information table; and

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said output information insertion unit has a function with which the value obtained by said alteration to said program_number is substituted for the PID value of a packet transmitting a ES contained in said packet stream transmitted.

- 5 19. The digital broadcast receiving system according to claim 16, wherein when said new packet stream is transmitted from said output information insertion unit via said circuit changing switch to said digital output section, at least one of an SDT, EIT, BAT, PCAT (Partial Content Announcement Table), TDT (Time Data Table) and TOT (Time Offset Table) is multiplexed with said new packet stream, and then outputted.

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